## We claim:

1.	A method of providing authentication in a wireless communication system
	comprising the steps of:

transmitting a first message to a first system, the first message comprising a mobile identifier for a subscriber of the first and a second system indicator indicating that the subscriber is attempting to gain access to a second system that uses an authentication process different than an authentication process used by the first system;

deceiving a second message from the first system having shared secret data associated with the subscriber;

generating an expected response to a unique challenge using the shared secret data and an encryption algorithm; and

transmitting the expected response to the second system.

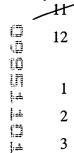
The method of claim 1, wherein the second system indicator includes at least one of the following: an electronic serial number set to a default or null value; a system capability parameter indicating that the subscriber is roaming in a GSM based wireless communication system; or a system access type parameter indicating that the subscriber is attempting to gain access in a GSM based wireless communication system.

## 3. An logical network entity comprising:

means for transmitting a first message to a first system, the first message comprising a mobile identifier for a subscriber of the first and a second system indicator indicating that the subscriber is attempting to gain access to a second system that uses an authentication process different than an authentication process used by the first system;

means for receiving a second message from the first system having shared secret data associated with the subscriber;

means for generating an expected response to a unique challenge using the shared secret data and an encryption algorithm; and



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1 means for transmitting the expected response to the second system.

The logical network entity of claim 3, wherein the second system indicator includes at least one of the following: an electronic serial number set to a default or null value; a system capability parameter indicating that the subscriber is roaming in a GSM based wireless communication system; or a system access type parameter indicating that the subscriber is attempting to gain access in a GSM based wireless communication system.

A method of providing authentication in a wireless communication system comprising the steps of:

receiving a first message at a first system, the first message comprising a mobile identifier for a subscriber of the first and a second system indicator indicating that the subscriber is attempting to gain access to a second system that uses an authentication process different than an authentication process used by the first system.

determining shared secret data associated with the subscriber using the mobile identifier and the second system indicator; and

transmitting a second message from the first system having the shared secret data.

The method of claim 5, wherein the second system indicator includes at least one of the following: an electronic serial number set to a default or null value; a system capability parameter indicating that the subscriber is roaming in a GSM based wireless communication system; or a system access type parameter indicating that the subscriber is attempting to gain access in a GSM based wireless communication system.

7. An authentication system comprising of:

means for receiving a first message at the authentication system, the first message comprising a mobile identifier for a subscriber of a first system to which the authentication system is a part and a second system indicator indicating that

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the subscriber is attempting to gain access to a second system that uses an
authentication process different than an authentication process used by the first
system;

means for determining shared secret data associated with the subscriber using the mobile identifier and the second system indicator; and means for transmitting a second message from the first system having the shared secret data.

The authentication center of claim 7, wherein the second system indicator includes at least one of the following: an electronic serial number set to a default or null value; a system capability parameter indicating that the subscriber is roaming in a GSM based wireless communication system; or a system access type parameter indicating that the subscriber is attempting to gain access in a GSM based wireless communication system.